Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN COUPLED RECEPTORS

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Inventor(s): Glucksmann et al. Application No: 09/781,886年 [二]		

Analysis of 17724 (399 aa)

5.2 mm 3.1 mm 5.2 × 1.6 × 2.0 × 2.3 7tm_1 4.9 4.0 ¹²1.8 no HMM hits PFAM

FIG. 1

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN Inventor(s): Glucksmann et al.
Application No: 09/781686. COUPLED RECEPTORS

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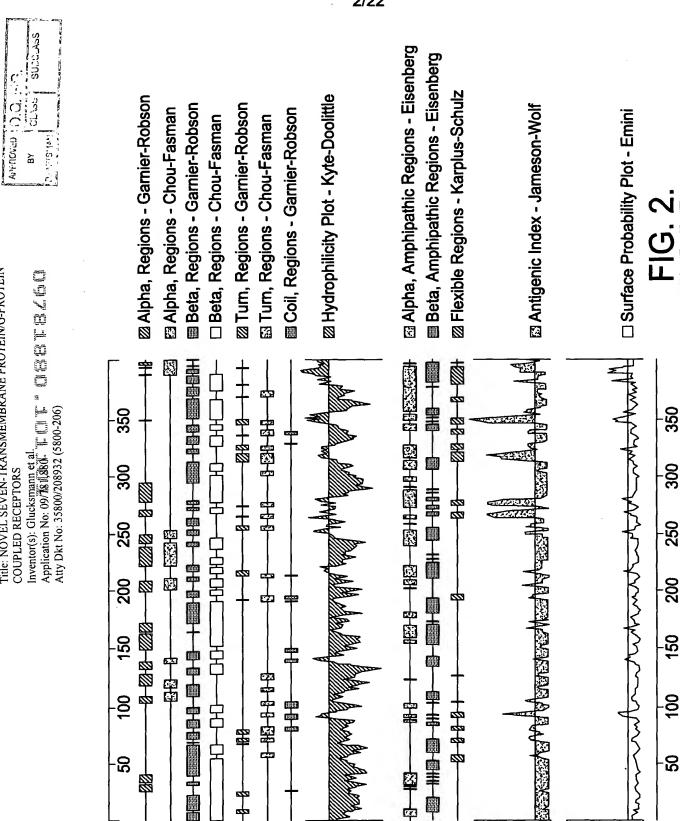
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-3.27

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Investigation (investigation): Glucksmann et al. Application No: 09/781,880

Atty Dkt No: 35800/208932 (5800-206)

3/22

Query: 17724

Scores for sequence family classification (score includes all domains): Mode (Description Score E-value N 7tm 1 7 transmembrane receptor (rhodopsin family) 94. 1 6. 1e-29 Parsed for domains: Model hmm-f hmm-t Domain seq-f seq-t score E-value 374 ... 259 () 94. 1 6. 1e-29 7tm 1 125 1 Alignments of top-scoring domains 7tm_1: domain 1 of 1, from 125 to 374: score 94.1, E = 6.1e-29 *->GN(LV: lv: lrtkk(rtptnifi(NLAvADLLf(ltlppwalyy)lvg GN ++;+ ++ +(+tp+++f++N ++ +L++ t +p +(+ (+ 17724 125 GNTIIIVMVIADTHLHTPMYFFLGNFSLLEILVTMTAVPRMLSDLLV 171 gsedWpfGsalCklvtaldvvnmyaSillLtaISiDRYlAIvhPlryrrr ++++ +C ++ ++ + + +S | Lt +++DR++AI+hPlry ++ 172 -- PHKVITFTGCMVQFYFHFSLGSTSFLILTDMALDRFVAICHPLRYGTL 219 17724 rtsprrAkvvillvWvlalllslPpllfswvktveegngtlnvnvtvCli 17724 17724 17724 tallvtlwLayvNsclNP;IY<-* FIG. 3. + v + (+ + + + + (NP + I)354 VRKVVALVTSVLTPFLNPFIL 374 17724

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN COUPLED RECEPTORS

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											MDA 253 Lung T	\$	20.25	19.75	0
											CHT 832 MDA 253 Lung T Lung T	8	19	24	0
											CHT 845 Lung T	40	19.54	20.47	0
ples											MDA 259 Lung T	40	21.29	18.71	0
17724 Expression in Clinical Lung Samples		2			X 20						CHT 726 Lung T	29.63	20.29	9.34	<u>۔</u> کز
Vinical L											CHT 911 Lung T	40	17.79	22.22	0
Sion in C											MDA262 Lung T	37.95	19.36	18.59	0
4 Expres							2				ပ	34.88	23.9	40.98	0.49
1772											CHT 816 Lung N		17.17	22.83	0
											MDA185 Lung N	39.89	17.89	72	0
											CLN 930 Lung N	8	20.25	19.75	0
											MDA183 Lung N	9	21.45	18.56	0
2	ζ.	?		-4. -4.	2.1	- 0		9. 6	t c	2.0		Mean 17/24	p z Mean	ن ا	UDISSE TXDIESSION

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6.0 5.0 4.0 4.0 6.0 8.0 9.0 9.0 9.0 9.0 9.0 9.0 9						Fetal Liver F	40.0	22.0	0.0
17724 Expression in Clinical Anglogenic Samparan						\Box	\dashv	\dashv	
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Brain N Brain	1772						+	\dashv	
						}-}	\dashv	\dashv	7:
							9	23.6	00

FIG. 5

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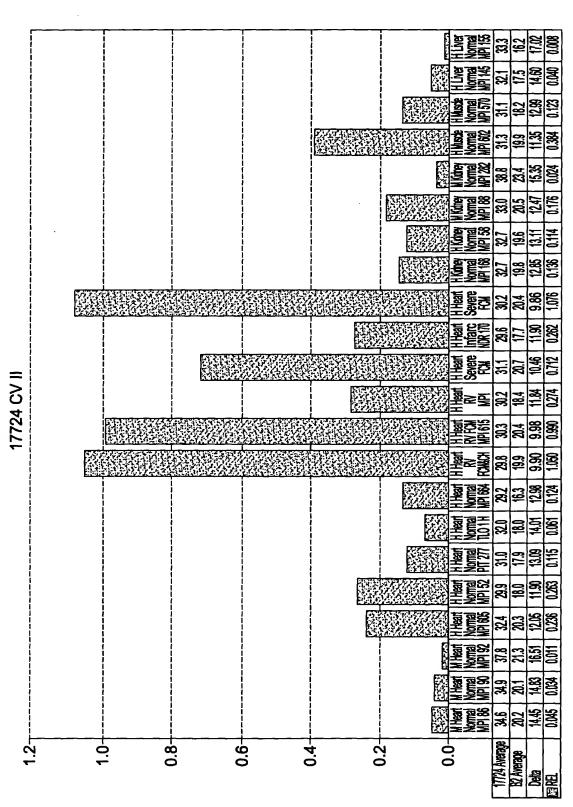


FIG. 6.

APPRIC. D

BY

	17724 CV III 31						orta M M Hint Hint Hint Mamm Gorona Corona Corona Renal Renal Vein Vein Normal Normal Ant Art Art ry ry ry ry Artery Artery Normal Normal	34.4 31.3 34.3 33.1 33.1 33.6 33.5 34.2 40.0 33.2 28.7 31.2 31.0	20.0 19.2 25.0 22.5 25.8 22.2 14.41 12.09 9.28 10.55 7.31 11.38	
H Aorta Mormal Aorta Normal Aor							Aorta Normal	31.3	19.2	201
Aorta H P P P P P P P P P P P P P P P P P P			I I I I I I I I I	[! 	 	H Aorta H Aorta N Normal Normal Ao CLN PIT 394 Nor	5.0 35.6 34	23.2	

FIG. 7

TO FIG. 8B. SJUCIASS 21.96 18.99 17.76 19.31 18.40 18.22 20.91 20.13 18.45 20.20 17.15 18.45 17.33 19.71 18.35 17.03 18.20 17.31 17.35 17.35 17.35 17.35 17.35 18.35 17.35 18.35 17.35 18.35 17.35 17.35 17.35 17.35 17.35 18.37 FIG. 8A. 4.5 API. ONLY PHAF S š <u>| 35.39| 30.66| 34.76| 31.68| 34.76| 32.66| 34.88| 37.23| 34.86| 38.34| 34.03| 37.05| 38.04| 36.95| 38.12| 35.66| 33.27</u> Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN Phase 1.2.1 expression of 17724 8 COUPLED RECEPTORS 37.76 31.01 33.16 33.84 34.20 35.70 Aortal Fetal Heart Inorma 0.5-3.0-2.0-1.5 <u>1.0-</u> 2.5

84

FROM FIG. 8A.

FIG. 8B

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN COUPLED RECEPTORS Inventor(s): Glucksmann et al. Application No: 09/78/1/80 [[]] [] [] [] [] [] [] [] [] [] [] [] Application No: 35800/208932 (5800-206)

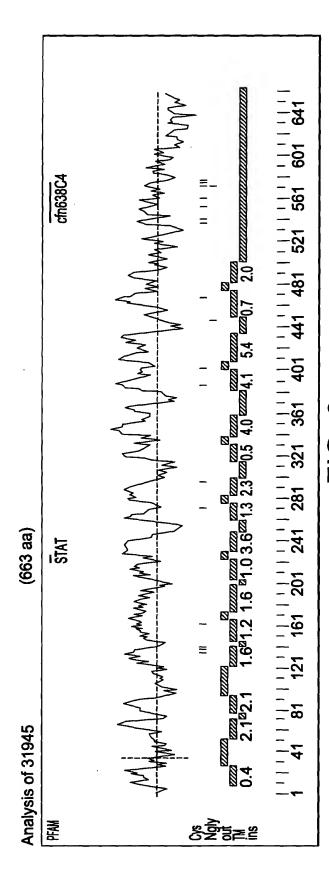
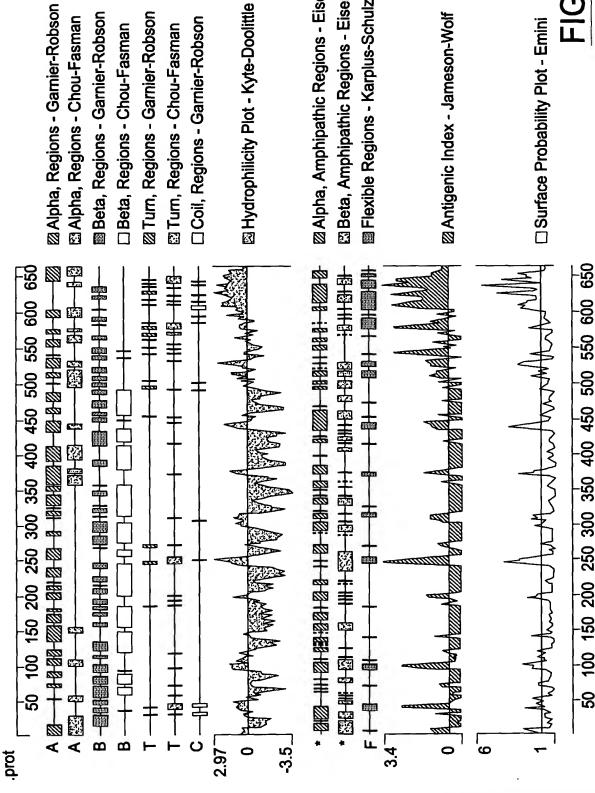


FIG. 9.

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN COUPLED RECEPTORS Inventor(s): Glucksmann et al.



Alpha, Amphipathic Regions - Eisenberg ☑ Hydrophilicity Plot - Kyte-Doolittle ☑ Turn, Regions - Garnier-Robson □ Coil, Regions - Garnier-Robson Tum, Regions - Chou-Fasman ☐ Beta, Regions - Chou-Fasman

図 Beta, Amphipathic Regions - Eisenberg Elexible Regions - Karplus-Schulz

Antigenic Index - Jameson-Wolf

□ Surface Probability Plot - Emini

<u>| 23.2| 29.3| 22.4| 30.8| 22.0| 20.6| 19.8| 20.0| 20.4| 24.8| 21.6| 40.0</u> 24.8 28.3 29.4 30.2 26.6 26.5 26.8 27.5 28.1 30.1 30.0 32.9 27.5 32.8 26.9 25.5 25.3 24.9 25.5 28.1 3 90.2 85.9 57.3 91.1 S (NDR | S (NDR | S (NDR | S (NDR) 107.3 291.0 20.9 45.7 92.4 112.2 173.0 301.3 580.0 33.6 23.9 222.1 <u>20.1|25.1|22.4|24.4|21.8|21.9|22.9|24.3|25.9|23.7</u> NHLF hango Ď SATE NALE IN LEGAL TO THE PERS MOCK T Œ. 8 88 88 88 88 636.9 528.2 482.7 112.6 69.8 166.0 25.3 26.4 29.2 25.1 30.6 25. 58) (67) 33) Relative Expression (TH2 24 RLD63 used as reference sampl) 600.0→ 500.0-300.0-100.0-E Expression S S

Taqman Chart+Table GPCR 31945 Expression

1500.0-

1400.0-

Application No: 09/78 [280] [[] [] [] Atty Dkt No: 35800/208932 (5800-206) Inventor(s): Glucksmann et al. COUPLED RECEPTORS

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN

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Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN COUPLED RECEPTORS Inventor(s), Glucksmann et.al. [] [] [] [] [] Application No. 35800/208932 (5800-206)

	88			14	
	1	প্ত		78	
	1 = 5	26.0		92.1	
· ·		29.9	21.7	8.9	
		29.7	23.8	43.9	
	1 = -	25.4 26.9	23.9	336.6	
	1 ~~	25.4	z	327.4	
	1 111	26.9	24.4	477.7	
Section 1	1 = 0	31.0 29.3 26.9 29.6 25.8 26.9	21.8	176.1 955.4 44.6 170.7	Ω
	_ ~ _	29.62	23.6	44.6	7
	E SS	26.9	125.4	355	_
	7 111 112	82	125.4	$\overline{}$	[
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	1 22 65	8 25	9 24.	4 1423	
	4 3 S S S S S S S S S S S S S S S S S S	724.	9 18.9	8 43.4	
•	A 25.7	25.3 24.7 24.8	18.4 18.9	2 48.8	
		225	4 18.	7 23.2	
		4 26.2	5	5 48.7	
	85. 45.88	25.4	18.5	2	

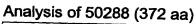
FROM FIG. 11A.

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN COUPLED RECEPTORS

Inven Glucksmann et ål. Appli No: 09/781,880

Atty Dkt No: 35800/208932 (5800-206)

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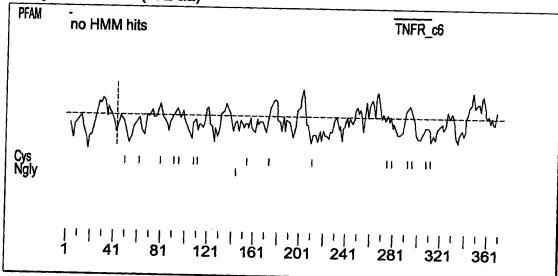


FIG. 12.

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DB781880 . Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN Application No: 09/781 880m. "T. [7] Atty Dkt No: 35800/208932 (5800-206) Inventor(s): Glucksmann et al. COUPLED RECEPTORS

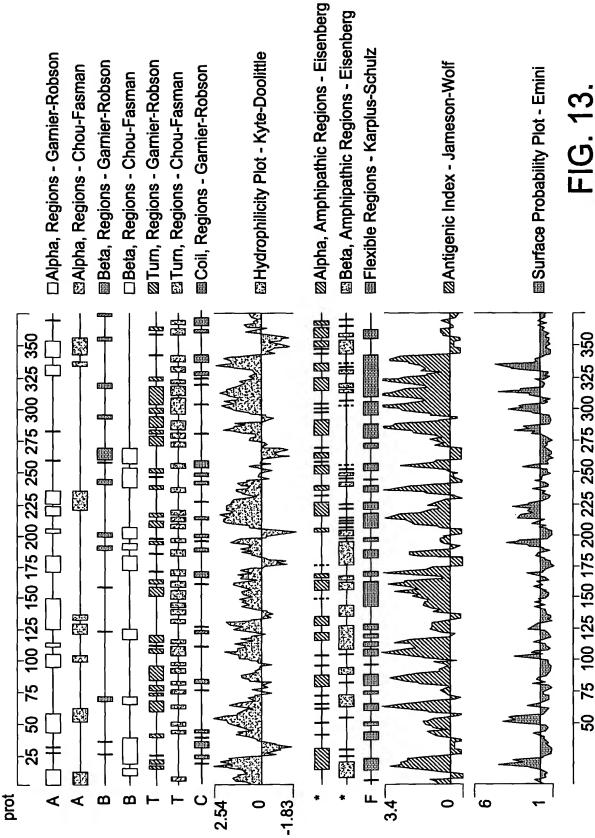


FIG. 13

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Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN

Inventor(s): Glucksmann et al.
Application No. 09/781,880 [] | T. | T. | T. | T.

COUPLED RECEPTORS

Atty Dkt No: 35800/208932 (5800-206)

TO FIG. 14B. 34234 274 WARREST CONTRACTOR TO A DATE OF THE SAME O 17724 GPCR Ph 1.9.1 Expression 10000000 Tagman Chart + Table THE STATE OF THE S 88 7 BREETEN AND STORY ELAY XV 50-150-200-450-400-350-300-250-9 Relative Expression CD14 Resting used as reference sample)

FIG. 14B.

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	NBA GEG 454	æ	-	0
e	Neut d14	33	22	2
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W/XXXXX	mPB 5034+	સ્ક	8	8
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	4 PBMC CD19 CD38	ક્ષ	-	ಜ
	Moc	क्ष	9	-
	Resting	88	=	
		l	ı	1 1

FROM FIG. 14A.

TO FIG. 15B.

CLN 012 MDA 25 Ovary T Ovary T NDR 07 NDR 12 PTT 208 CHT 650 CHT 619 WA CLN 03 CLN 05 CLN 17 CLN 07 CLN 08 Breast T Breast T Ovay N Ovay N Ovay N Ovay N Ovay T Ovay T Ovay T 17724 Expression in Oncology Plate I **3** 3 **\$** NDR 13 PTT 400 PTT 371 PTT 56 MDA 106 Breast N W.Z 器 0.1 0.5 0.2 0.15 -0.05 0.45 0.4 0.35 0.3 0.25-

Inventor(s): Glucksmann et al.

Application No: 09/781,880 [] | F. F. [] | F. W. [] | F. F. F. F. M. [] | M. Atty Dkt No: 35800/208932 (5800-206)

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN

COUPLED RECEPTORS

≨ €		8	30.2	19.75	0		
अग्र अंड्रा अग्र		8	19	71	0		
经形		9	5 6	Ŋ̈́Ω	0		
S	Lung T	9	7. 2.	1871	0		
CHT911 CHT726	Lung 1	300	20	9.34	15.	m.	
	rung	₹	2	77	0	5B	
 ≨ §	E B	37.55	2	63	0	7	`
CH 814	Lung 1	80 X		108	0,49	<u>D</u>	
CHT816 CHT814	Lung N		110	28	0	LL	.
로 동	Lung N	er er	23	2	0		
	Lung N	8	ğ	197	0		
₹ 8	LungN	8	¥.	\$	0		
				\neg	\neg		

FROM FIG. 15A.

TO FIG. 16B.

 $0.034 \\ [0.011] \\ 0.236 \\ [0.263] \\ 0.115 \\ [0.024] \\ 0.0061 \\ 0.1061 \\ 0.1361 \\ 0.1141 \\ 0.1161 \\ 0.0241 \\ 0.0241 \\ 0.0241 \\ 0.1231 \\ 0.0401 \\ 0.0081 \\ 0.300 \\ 0.0081 \\ 0.$ MPI 613 NDR 170 MPI 617 MPI 168 MPI 58 MPI 88 MPI 282 MPI 602 MPI 570 MPI 145 I FIG. 16A 14.45 | 14.83 | 16.51 | 12.05 | 11.90 | 13.09 | 14.01 | 12.98 | 9.90 | 9.98 | 11.84 | 10.46 | 11.90 | 9.86 | 12.85 | 13.11 | 12.47 | 15.35 | 11.35 | 12.99 | 14.45 | 14.81 | 12.82 | 13.11 | 12.47 | 15.35 | 11.35 | 12.99 | 14.45 | 14.81 | 12.82 | 13.11 | 12.47 | 15.35 | 11.35 | 12.99 | 14.45 | 14.81 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 | 12.47 |38.8 33.0 32.7 32.7 30.2 17724 CV II and III 29.6 31.1 Inventor(s): Glucksmann et al.
Application No: 09/78 [[380]]. | | | | | | | | | | | | | | | Atty Dkt No: 35800/208932 (5800-206) 30.2 MPI 614 NPI 615 30.3 29.8 MPI86 | MPI90 | MPI92 | MPI605 | MPI52 | PIT277 | TLO 1 H | MPI664 | 29.2 18.0 32.0 34.9 34.6 20.2 0 4-3 4 5 စ် 图0.045

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN

FIG. 16B

F 133 26.6 11.38 12.70 8.13 12.45 10.31 4.98 9.54 10.94 7.95 8 8.6 **医** 6.324 0.375 0.150 3.570 0.179 0.790 7.000 1.343 0.509 4.058 31.2 N.W. 怒 28.7 뚪 31 33.2 MP1 526 | MP1 442 | MP1 438 | MP1 532 | CLN 67 | CLN 66 | 40.0 34.2 26.1 33.5 33.6 33.1 33.1 MP 525 34.3 25.0 0.183 0.046 0.230 1.614 0.667 MPI 93 MPI 528 313 34.4 12.42 14.41 CLN 618 PTT 394 35.6 35.0

FROM FIG. 16A.

DS/E1560 Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN Application No. 09/781,8800 T. [1] T. Atty Dkt No. 35800/208932 (5800-206) Inventor(s): Glucksmann et al. COUPLED RECEPTORS

Title: NOVEL SEVEN-TRANSMEMBRANE PROTEIN/G-PROTEIN COUPLED RECEPTORS
Inventor(s): Glucksmann et al.
Application No: 瓊如龍,第80正 [[]] [[]] [[]] [[]] [[]] [[]] [[]] Atty Dkt No: 35800/208932 (5800-206)

